

Near-Infrared Imaging Spectroscopy of the Impacts of SL9 Fragments C, D, G, K, N, R, V, and W with Jupiter

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We used the Infrared Imaging Spectrometer (IRIS) on the Anglo Australian Telescope to monitor the collisions of Comet Shoemaker-Levy 9 fragments C, D, G, K, N, R, V, and W with Jupiter. We will summarize the impact timings and provide calibrated, spectrally-resolved light curves for each of these impact events. The abundances of CO, CH₄, NH₃, excited H₂, and aerosols within the evolving fireball will be presented. We will also describe the spatial distribution of these species within the impact clouds.